

AX - I - DENT - AX

EMPLOYEES' MAGAZINE

United States Smelting Refining and Mining Company
and Subsidiaries



WELFARE



IN THIS NUMBER

UTAH WELFARE ASSOCIATIONS

MY VACATION IN BIG COTTONWOOD CANYON - - - Manassah Smith

WE BELIEVE IT WHETHER YOU DO OR NOT

DO NOT CONDOLE NOVEMBER'S COLD,
CONSOLE YOURSELF WITH OUR KING COAL

CONSTRUCTION OF DROSSING FURNACE CRUCIBLE - Manassah Smith

THE DEVIOUS PATHS WHERE WANTON FANCY LEADS—Rowe

THOMAS ALVA EDISON

ITEMS, LITERATURE AND PERSONALS FROM VARIOUS SOURCES

SOMETHING TO THINK ABOUT - - - - - Ernest N. Smith

NOTES FROM COMPANY PLANTS

Volume 16

November - 1931

Number 11

The "A, B, C's" of Safety First

- A—Is for accident which causes sorrow.
- B—Is for bandage we may use tomorrow.
- C—Is for carefulness while you work hard.
- D—Is for danger, be on your guard.
- E—Is for emergency, you might get hurt,
- F—Is for forgetfulness, be on the alert.
- G—Is for going, watch your step,
- H—Is for hazards that should not be kept.
- I—Is for injuries that you may receive,
- J—Is for judgment, use it as you please.
- K—Is for kindness which should always be used,
- L—Is for learning that we all should choose.
- M—Is for misfortunes, beware of them all.
- N—Is for neglect that causes the fall.
- O—Is for orphans that are left behind,
- P—Is for parents that should think in time.
- Q—Is for questions that come up each day,
- R—Is for railroad work and not play.
- S—Is for safety, the only cure.
- T—Is for thinkers, the ones that are sure.
- U—Is for usefulness that should apply to all men,
- V—Is for victory that we surely should win,
- W—Is for workman that does his work well.
- X—Is for crossing, listen for the bell.
- Y—Is for yards where they switch to and fro.
- Z—Has no place in this, so just let it go.

—T. E. Bailey

AX - I - DENT - AX

VOLUME 16.

SALT LAKE CITY, UTAH, NOVEMBER, 1931

NUMBER 11.

United States Smelting Refining and Mining Company and affiliated companies

United States Smelting Refining and Mining Company

Number One State Street, Boston, Massachusetts
Fifty-seven William Street, New York City
Newhouse Building, Salt Lake City, Utah

United States Stores Company

Newhouse Building, Salt Lake City, Utah
Dexter Horton Building, Seattle, Washington

United States Fuel Company

Newhouse Building, Salt Lake City, Utah
(Agents in all principal cities throughout the west)

United States Fuel Sales Agency

Newhouse Building, Salt Lake City, Utah

Hanover Bessemer Iron and Copper Company

Fierro, New Mexico

Hammon Consolidated Gold Fields

Nome, Alaska

Fairbanks Exploration Company

Fairbanks, Alaska

Compania de Real del Monte y Pachuca

Pachuca, Hidalgo, Mexico

U. S. S. Lead Refinery, Incorporated

East Chicago, Indiana

Utah Railway Company

Newhouse Building, Salt Lake City, Utah

United States Smelting Refining and Mining Exploration Company

Number One State Street, Boston, Massachusetts
Newhouse Building, Salt Lake City, Utah

U. S. Smelting Exploration, S. A.

Pachuca, Hidalgo, Mexico

Central Research Laboratory

Cambridge, Massachusetts

Customs Agent Office

Apartado Number One Hundred Seven
Vera Cruz, Mexico

Utah Welfare Associations

UNITED STATES SMELTING REFINING AND MINING COMPANY

U. S. MINE WELFARE ASSOCIATION

The U. S. Mine Welfare Association at Bingham Canyon, Utah, authorized contributions and expenses as follows during October, 1931:

Mrs. Emma Evans Miller (mother of P. M. Evans, deceased).....	\$100.00
Mrs. Madge Nichols (wife of employee)	50.00
J. C. Gobbis	50.00
Will H. Trevarthen (4 months' salary as secretary).....	20.00
	\$220.00



LARK MINE EMPLOYEES' BENEFIT FUND

Balance, January 1, 1931.....	\$288.50
Collections, January to September, inclusive	234.00

\$522.50

Disbursements:	
January, 1931—	
Flowers	\$ 5.00
Heber J. Beckstead.....	20.00
Henry A. Beckstead.....	25.00
February, 1931—	
Henry A. Beckstead.....	25.00
Flowers	5.00
March, 1931—	
Henry A. Beckstead.....	25.00

April, 1931—

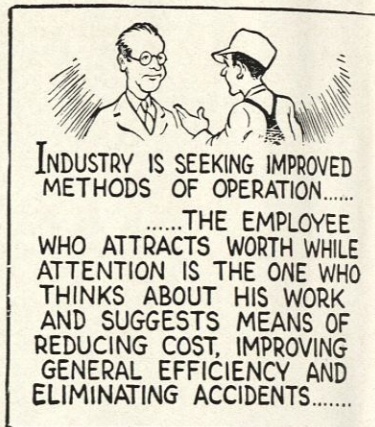
Henry A. Beckstead..... 25.00

September, 1931—

Flowers 5.00 |

\$135.00

Balance, October 1, 1931.....\$387.50



U. S. EMPLOYEES' BENEFIT FUND

The following claims were approved in October, 1931, at the Midvale plant:

Hans Herman Newman, 16 days, final pay	\$ 16.00
Arthur Cundick, 8 days, final pay..	8.00
C. D. Richards, 13 days, part pay....	13.00
Thomas M. Allsop, 30 days, final pay	30.00
Tom Mace, 13 days, final pay.....	13.00
Arthur C. Jensen, 4 days, final pay	4.00
A. W. Christopherson, 14 days, part pay	14.00
Williard Tripp, 17 days, final pay..	17.00
Herman Newman, 34 days, part pay	34.00
Rock Labrum, 11 days, final pay....	11.00
A. W. Christopherson, 14 days, part pay	14.00
Howard E. Phelps, flowers for Matt Koehn funeral.....	4.00
Fred Anderson, donation.....	50.00

\$228.00

All free governments, whatever their name, are in reality governments by public opinion; and it is on the quality of this public opinion that their prosperity depends.—Lowell.

My Vacation in Big Cottonwood Canyon

By MANASSAH SMITH, Mason Foreman
Midvale Plant

United States Smelting Refining and Mining Company

First of all, I did not have any desire to cross the deserts to reach California. I have visited most of our national parks so decided to spend my vacation in Big Cottonwood Canyon at the Utah Outdoor Camp.

I rented a cabin for two weeks and had a wonderful rest. The location is right in the very center of about fourteen trails leading to many wonderful lakes and observation points. I did not take advantage of the hiking very much, only going to Dog Lake and some of the mines. Once a week, on Friday night, all of the campers in the locality met and had a camp fire. A Mr. West, one of the forest rangers, had charge of a program. Everybody was expected to take part and it is surprising how much wonderful talent was procured from the gathering. Mr. West was certainly entertaining and one would suppose he were from the R.-K.-O. instead of being a forest ranger.

Then there is the Christmas Seal Health camp where some sixty youngsters under the direction of a nurse and other aides have their outdoor sports, hikes, ball games and various other amusements. They are undernourished children but not one case of tuberculosis among them. It is worth one's time to visit this beautiful spot.

Another interesting feature is to visit the outdoor camp of the blind where some fifty people are privileged to visit for ten days in the Utah Outdoor Camp, sponsored mostly by the Lions Club of Salt Lake City. Through the courtesy of Mr. George Green, forest ranger, and Mr. Nord, forest supervisor, their tents are furnished free. Under the supervision of Mr. Murray Allen, they present splendid programs at night; some noted music professors are among them. Each year they take one or two long hikes with Mr. George Green, forest ranger, and he told me he enjoys hiking with the blind more than with any other people. In all his hikes with the blind, he has never had one person make a mis-step or meet with an accident. They can distinguish every flower and tree, play cards and checkers and work around camp almost as well as those who see.

In conclusion, I will say I really enjoyed my vacation very much and was so delighted with that part of the canyon that I leased some ground from the Government and have built a summer home there.

BINGHAM FIREMEN WIN

The residential portion of a pioneer mining camp in the west usually consisted of wooden shacks or canvas tents hastily thrown up and so arranged that a fire would sweep everything away. Business sections of such mining camps were likewise fire hazards. Likewise the use of steel and concrete were practically unknown in early mines and mills.

To be a member of a volunteer fire department in an early mining camp, was considered a great honor. Those who have visited Virginia City will recall that the volunteer fire stations are among the most prized possessions. On the floors may be seen the old fire engines; the walls are adorned with pictures of members and equipment.

Sometimes, owners of brick buildings in mining camps found it necessary to provide means to protect their structures against inflammable buildings near by. Those who visited Kennett, will recall the well appointed Diamond Hotel and the huge asbestos curtain which was rolled over the south wall whenever a fire broke out in town.

Bingham, Utah, is one of the most unique mining camps in the world—a long string of buildings in the bottom of a gully. In the recent first aid contest, the volunteer fire department of Bingham, won the first prize.

Irvin Stillman, captain; Ray Taton, Wayne Hansen, John Creedon, W. H. Harris and Loren Stokes, members, comprised the bunch who won first place at the Utah State Fair.

"I never knew an early-rising, hard-working, prudent man, careful of his earnings and strictly honest, who complained of hard luck. A good character, good habits and iron industry are impregnable to the assaults of all ill-luck that fools ever dreamed of."

We Believe It

ANIMAL BEHAVIOR AND THE WEATHER

Ducks and geese "go north and south" at quite regular times. This migration is not limited to North America and birds in Argentina may spend part of the year in California; likewise a summer resident of Alberta may spend its winter in Mexico. Animals are interesting from every angle but the reaction of migration is one of the most interesting of all. These birds travel over unknown places to gather food in territory in which they are entirely unacquainted. Along other lines of animal behavior, a trained observer has recently stated that "birds, beasts and flowers do not forecast the weather." It is apparently the opinion of this writer that the reactions of animals in regard to heat, cold, etc., are brought about by immediate sensations rather than by long range imaginations. This writer also goes on to say that battles do not cause rainfall, that the moon does not affect the weather, there is no such thing as an "equinoctial storm" and that the winters are just as cold as they used to be.

GOLD OF LEADING COUNTRIES

All the monetary gold in the world could be cast into a cube 31.4 feet on each side. The cube would weigh 18,600 tons; it would have a value of \$11,215,093,000. July, 1931, figures show the following holdings of some of the leading countries:

United States	\$4,445,421,000
France	2,180,855,000
England	734,924,000
Germany	569,376,000
Spain	467,715,000
Japan	422,449,000
Argentina	363,160,000
Italy	279,793,000
Russia	261,895,000
Belgium	201,284,000
Netherlands	180,891,000
India	147,264,000
Canada	101,877,000
All Other Countries.....	858,189,000

THE EYES HAVE IT

Henry W. Fowler, curator of fish and reptiles at the Philadelphia Academy of Natural Sciences, has been making a study of fish and fishing for forty years. His researches have disclosed that fish have sharp eyes but very dull ears. There is a popular notion that one who talks while fishing reduces his catch. But Mr.

Fowler states that this is not the case. Moving shadows cause fish to move and seek protection in other places. He has also observed that smoke coming out of a funnel of an oil burner will cause fish to go to depths far below the surface.

STARTLING FACTS

In the United States one person is accidentally killed every six minutes—ten persons every hour. The injuries are one hundred thirty-eight times as great, for twenty-three persons are accidentally injured every minute in the United States. About 33,000 people are killed or injured each day—about 12,000,000 per year—one-tenth of our entire population. Five times as many persons are killed or injured every year as die from natural causes. Unemployment is a bad thing, but more people are not working on account of injuries than from lack of employment. A person is twice as liable to die from accident as from old age. More persons are killed or injured yearly than have been killed or wounded in any war of the last two hundred years.

If you have read this paragraph slowly and reflected a little upon it, please remember that one person has been accidentally killed and more than one hundred fifty people have been injured while you were reading it.

NATIONAL PARK LIONS

Those who have visited Yellowstone National Park have been entertained and amused by the antics of the bears. South Africa has its great Kruger National Park named in honor of Oom Paul who resisted the British vigorously. Visitors to the park are given a pamphlet called "Hints for Our Visitors." Among other items are the following:

"Don't get alarmed if lions stand and stare at your car. They have probably not seen one before, and are naturally overwhelmed with astonishment. They don't mean any harm and in fact are looking at your car and not at you. The lion's nose tells him at once that a car is not good to eat and only smells of petrol, and he has not realized that human beings are inside; if he did he would run away. If you find lions standing or lying in the middle of the road in front of you, it is not necessary to do more than slow down; when you get close they will get up and move to the side out of your way. But

Whether You Do or Not

don't get within a hundred yards of a lioness with small cubs. She will think you mean to harm them and may take steps to prevent you from doing so. Stop your car until she has got her cubs away, when she will quickly follow them. Don't forget that if you fire and wound a lion or lioness, you are making unnecessary trouble for yourself. The animal, probably merely curious before, will become indignant and may try to get level with you."

Readers will note that tourists are allowed to carry firearms through the park which is not the case in Yellowstone National Park. In "Hints for Our Visitors," the following humane appeal is made:

"We, the wild animals of the Kruger National Park, appeal for your sympathy and friendship. You have been our bitter enemies for so long that it takes time to make us understand that a new and happier era has begun for us. Do not betray our trust in you."

ARE YOU BUYING FURNITURE?

Most people are acquainted with the meat inspection labels of the United States Department of Agriculture and probably everyone has noted the labels on catsup bottles and other containers telling how much benzoate of soda, etc., is used to keep bottled goods from spoiling. Uncle Sam investigates a lot of things besides meat and catsup. "Furniture, Its Selection and Use," is one of the newest books issued by the United States Department of Commerce. It is simply, yet forcefully, written, contains fifty illustrations, one hundred and twenty pages of text and gives you a lot of information about woods, "stuffing" and fabrics in furniture. This book may be obtained by writing to the Superintendent of Documents, Washington, D. C., enclosing a twenty-cent personal check, twenty-cent money order or currency; the last named is transmitted at the sender's risk. Postage stamps are not acceptable. Be sure to give the exact title of the book.

SCHOOL VENTILATION

According to Dr. C. E. A. Winslow, professor of public health at Yale University and chairman of the New York Commission on Ventilation, more than \$2,500,000 is wasted annually on unnecessary

ventilating systems for schools. In addition, ventilation systems in some schools present health hazards. Twenty states have laws concerning ventilating devices which require that there be an air supply of thirty cubic feet per minute per pupil. This supply of air can only be obtained by mechanical ventilation which is not only costly but in some cases inimical to health since there is a tendency through such operations to produce drafts and overheating. Evidence of this commission shows that the window-gravity method of ventilation, wherever it is possible to use it, (and it is nearly always possible to do so), is more satisfactory than the fan system. The New York Commission recommends the maintenance of corridor and gymnasium temperatures of 65 degrees Fahrenheit; 75 degrees Fahrenheit in swimming pools and dressing rooms and 68 degrees Fahrenheit in all other occupied rooms. The commission issues a warning against overheating. It is recommended that classrooms have at least fifteen square feet of floor space and two hundred cubic feet of air space per pupil and that accurate thermometers be used in different rooms to check temperatures.

"SOW AND YE SHALL REAP"

A company on Puget Sound will plant seed oysters from Japan in January or February and harvest the oysters in the fall. Fifty million seed oysters have been planted in the Padilla beds—the harvest is now on. These oysters will be harvested before they attain the huge "beefsteak" size sometimes seen.

TEMPERING METALS

Mr. C. H. Desch has reported to the American Society for Steel Treatment, that hardened metals will become still harder if they are put in a rotating magnetic field. Iron and steel are not only affected in this way, but brass and duralumin are also made harder. In the case of duralumin, the degree of hardness normally attained in thirty-four hours was effected by the magnetic method in twelve hours. Working tools may be treated, no matter how complicated their form. Hardening metals through the effect of the magnetic field was discovered by the English metallurgist, E. G. Herbert.

Notes from Fairbanks, Alaska

O. J. EGLESTON, Correspondent

The story about the big baseball game at Midvale in the August number was very interesting. Most everyone here has been asking why it was that they did not let some of the good players in the Salt Lake office perform.

Mr. H. C. Cantelow, general manager of the Alaska Steamship Company, paid us a visit recently. Mrs. Cantelow came with Mr. Cantelow on her first trip to Fairbanks and enjoyed seeing the dredges.

Mr. Corey C. Brayton, representing the American Manganese Steel Company, visited us during the latter part of September. He is an oldtimer in Alaska as well as in Kennett, California. He spent several days at the Fairbanks Exploration Company operations and neighboring properties and left for Nome by airplane.

A. L. Lindsay, thawing assistant at our Chatanika operations, and Miss Helen Cacy, of Chatanika, were married recently.

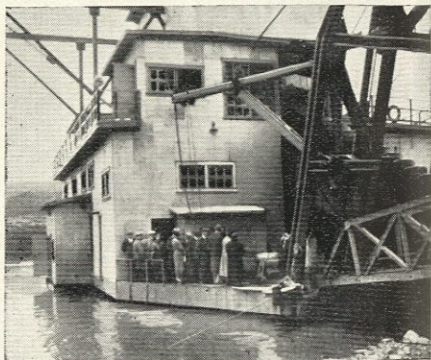
Tom Larmore, warehouse man in our Fairbanks stores department, passed cigars a few weeks ago. The occasion was the arrival of a fine baby girl who tipped the scales at eight pounds and ten ounces.

Among the Fairbanks young people who left here during September to attend school in the states were Marvin P. Eggleston, who is returning to Massachusetts Institute of Technology; Ruth McFarland, who will attend the University of Washington at Seattle; Carra Harlan, who will attend Pomona College, Claremont, California, and Louise Harlan, who will be at St. Helen's Hall, Portland, Oregon. Rebecca Hopkins will also attend St. Helen's Hall this year. Joe Hopkins is a student at Lake Forest Academy, Lake Forest, Illinois, this year. Betty Hopkins is taking post graduate work at the University of Minnesota.

The freeze up came early this year. It was sufficiently severe to make it necessary to turn the water out of the Davidson ditch on September 28. The siphons were drained September 29 and 30. The draining of these, in freezing weather, is a job that requires great care as slush ice collects on top of the water and as the water recedes in the legs of the siphon, the slush ice sometimes hangs up and later slides down and meets the water; it

is consolidated enough to form a nearly air tight plug. As water is continued to be drawn, a partial vacuum is formed between the lower side of the ice plug and the receding water which causes the steel pipe to collapse. This happened in 1928, causing the collapse of several hundred feet of the Belle Creek siphon, and this year at Boston Creek siphon where a short length only was collapsed. It was thought that every possible precaution was being taken this year, but unusual conditions prevailed. The collapsing pipe was immediately detected, and the water outlet closed in time to prevent serious damage.

As the progress of stripping depends entirely upon the operation of the Davidson Ditch, an effort is made to keep the



Visitors on One of the Dredges at Fairbanks

water running as long as possible, but when cold weather approaches, it is necessary to turn the water out of the ditch in order to prevent the accumulation of ice in the siphons. There are fifteen siphons with an aggregate length of something over six miles. Siphons are located at points along the ditch line over a length of nearly fifty miles so that the problem that looms up when cold weather approaches is not a simple one. Fortunately the siphons have been drained each year with small damage in a very few instances. Careful records are kept of both water temperature and atmospheric temperature in an effort to get data that will be a guide for the future.

Frank Widigar, foreman of thawing area number 3—Goldstream, met with an accident, the result of which was a badly broken arm which will require special treatment for the best results. Mr. Widigar left for Seattle on the 12th of October to be under the care of a specialist for a few weeks. We extend our best wishes for a speedy recovery.

Mr. W. M. Rosewater left Fairbanks on October 12 for Los Angeles. Mr. Rosewater is a mechanical engineer and was engaged for several years by this company in the design of dredges. He has recently spent several months here making designs and estimates on some proposed changes for Chatanika Dredge No. 3.

JESSUP IN THE JUNGLES

For three and one-half years, John W. Jessup, nine years old, has lived with his father and mother in Africa. While Douglas W. Jessup, former assistant superintendent at Midvale, was attending to his metallurgical duties, John was gathering information to delight the school boys of Salt Lake City. The following account appeared in the Salt Lake Tribune under date of October 17:

"Pupils of the Douglas school hold John W. Jessup in awe.

"For this nine-year-old boy is just back from Africa, where jungles are really jungles and not the refuge of the 'Weary Willies,' as they are in this civilized country.

"But John has a collection of African mementoes that would do credit to the veteran hunter of the wild animals of the southern continent.

"Leopard skins, spears, axes and even masks are in his collection, which he acquired at Rhodesia, South Africa, where he attended school for the last three years.

"These masks were used by the natives, says John, and not just for Hallowe'en, but for every other day, when they feared that the evil spirits were about to swoop down upon them. The masks just frightened the spirits away—that is, the evil ones. The good spirits were educated and didn't fear the masks, the natives declared.

"But John, who is the son of Mr. and Mrs. D. W. Jessup, 656 Twelfth East street, thinks Salt Lake schools are far superior to the government school he attended."

East Chicago Notes

E. C. SPENCER, Correspondent

The winners of the horseshoe tournament, held the first week in October, are as follows: First place, John Knaver and Hugo Johnson; second place, William Mowry and Ed Kucken; third place, Hiles Quigley and William Wyant. The tournament was very interesting and much enthusiasm was shown. The games were played during the noon hours and evenings.

Al Schuler of the Engineering Department attended the Northwestern and Notre Dame game in Chicago. Al said it rained so hard all afternoon that the game could just as well have been played in Lake Michigan. The final score was a tie, 0-0, and from the results, they were all wet.

George Eppl had a birthday party that was a great success and everyone had an enjoyable time. The evening was spent in dancing and entertainment was provided by some of the guests. At eleven o'clock, a luncheon was served. George is just another year older and we hope he has more parties.

The Twentieth Annual Safety Congress and Exposition was attended by several of our employes. The sessions attended were those of Fire Prevention, Metals, Foreman's Forum. The meetings were very educational.

Doctor Ernst is still an Athletics fan, regardless of the Athletics' defeat in the World Series. We hope he picks a winner next time.

Harold Faint, who was called East on account of the death of a relative, has returned to work.

The girls of the office have challenged the boys of the laboratory to a horseshoe tournament. They have chosen the following partners, after much deliberation: G. E. Vanderhoof and Ellen Carlson; Fronie Fillinger and Evelyn Kerr; Jack Whelan and Eddie Kucken; Eugene Schmidt and Hank Haugh. This tournament promises much amusement. (Also a novel suggestion for other plants.—Editor.)

A republican government in a hundred points is weaker than an autocratic government: but in this one point it is the strongest that ever existed—it has educated a race of men that are men.—Henry Ward Beecher.

Do Not Condole November's Cold

Papa's Girl

Teacher: "Paphlagonia Jones, what is your father's occupation?"

New Pupil: "Please, ma'am, he writes the names for the Pullman cars on the railroad!"

Putting Roller Skates on Old Father Time

It was little Willie's first ride in a railway train, and the succession of wonders had reduced him to a state of hysterical astonishment.

The train rounded a slight bend and with a shriek of its whistle plunged into a tunnel.

There were gasps of surprise from the corner where little Willie was kneeling.

Suddenly the train rushed into broad daylight again, and a small voice was lifted in wonder.

"It's tomorrow!" gasped the small boy.

Different

First Prizefighter: "Say Bo, when I hit a guy he remembers it."

Second Prizefighter: "Well, get this—when I hit 'im, he don't."

And "Oats So Easy"

"The horse you sold me last week is a fine animal, but I can't get him to hold his head up."

"Oh, it's because of his pride. He'll hold it up as soon as he's paid for."

Or Page Santa Claus

'Twas the night before payday, and all through my jeans,

I hunted in vain for ways and for means. Not a quarter was stirring, not even a jit; The kale was off duty, the greenbacks had quit.

Forward, turn forward, O Time in your flight,

And make it tomorrow, just for tonight!

Safetyfus

There's so much safety in the worstofus, And much more safety in the bestofus, So it behooves allofus, To practice safety on the restofus.

Who Has His \$3,000?

First Bo: "Say, did youse know dat de wealth of dis country was over \$3,000 for every person?"

Second Bo: "My Gawd, I've been robbed!"

Identification

Guide: "This, sir, is the leaning tower of Pisa."

Tourist: "Pisa! Let me think. No, that does not sound like the name of the contractor who built my garage, but it looks like his work."

True Chivalry

The genius of a certain Arkansas editor showed itself recently when he printed the following news item in the local columns of his paper:

"Miss Beulah Blank, a Batesville belle of twenty summers, is visiting her twin brother, age 32."—Arkansas Taxpayer.

If Crooked "Twist"

"Do you know of a fellow down your way with one leg named Oliver?"

"I'm not sure," returned the other doubtfully. "What's the name of the other leg?"

"Search and Ye Shall Find"

Biology Professor: "Where do all the bugs go in the winter—"

Absent-Minded Student: "Search me!"

"Hot Dog"

Jane, six years old, was out for a ride in the country. She saw a swamp where cat-tails were growing.

"Oh, daddy!" she exclaimed, "Look at the hot dog garden!"

Scotchman Killed!

He lit a bomb—but couldn't make up his mind to throw it away.

And How!

Billboard advertisement: "Skelly gas—it's Refractionated."



Console Yourself With Our King Coal

Maybe He "Stammered"

We were always sorry for that lad who spent his last dollar for a bottle of Listerine and a cake of Lifebuoy—only to find he was unpopular anyhow.

Hoot Mon-ogrammed!

There's a story going 'round about the Scotchman who wanted to smoke mono-grammed cigarettes, so he changed his name to Chesterfield.

Another Drouth?

A tourist was enjoying the wonders of California, as pointed out by a native.

"What a beautiful grapefruit!" he said, as they passed through a grove of citrus trees."

"Oh, those lemons are a bit small, owing to a comparatively bad season," explained the Californian.

"And what are those enormous blossoms?" asked the tourist.

"Just a patch of dandelions," said the Californian.

Presently they reached the Sacramento river.

"Ah," said the tourist, grasping the idea, "Somebody's radiator is leaking."

Big Money

An ancient car chugged painfully up to the gate at the races. The gate-keeper, demanding the usual fee for automobiles, called:

"A dollar for the car."

The owner looked up with a pathetic smile of relief and said:

"Sold."

Couldn't Trap the Doctor

"Oh, Dr. Morgan," cooed the sweet young coed to our promising young psychiatrist, "I lost my Intelligence Test. Will I have to be examined all over again?"

"No," responded our good doctor gallantly, "only your mind."

Not in California

"Is this a good place for rheumatism?"

"It be that, zur. Oi got mine 'ere."

Safety First

A lady motorist driving along a country road spied a couple of repairmen climbing telephone poles. "Fools!" she exclaimed to her companion, "they must think I never drove a car before."

Handicap Race

"How is it?" said one dog owner to another, "that your dog knows so many smart tricks, while mine is so dumb?"

"Well, you see," said the other, "you've got to know more than the dog to start with."

Now They Know

A young couple who were just married received many presents after establishing their home in a suburb. One morning they received two theater tickets, with a note which read: "Guess who sent these?"

On the appointed evening they went to the theater, returning very late. To their astonishment everything of value in the house had been carried away.

On a table in the dining room they found this note: "Now you know."

Education Pays

And then there's the story about the Scotchman who stayed away from a municipal banquet because he didn't know the meaning of the word "gratis" on the invitation. The next day he shot himself over an open dictionary in the public library.

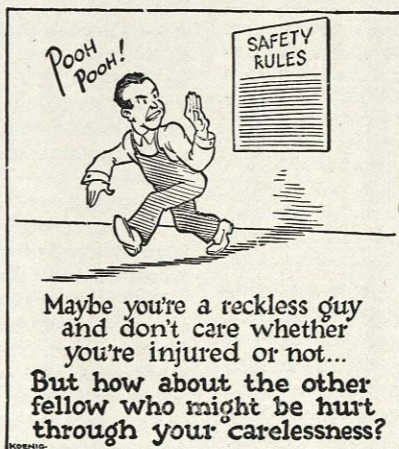
Keep It From Woodcock

Bird Fancier: "That bird won't fly. All he wants to do is sit down."

Sweet Young Thing: "Oh, it must be one of those stool pigeons!"

Hard Job

When you come to think of it, Henry Ford hasn't such an easy job, after all. Think of getting down to work at 8:30 every morning and signing his name on the front of every car that comes out of the factory all day long.



AX - I - DENT - AX

SAFETY FIRST
EDGAR M. LEDYARD, EDITOR
VIRGINIA BAKER, ASSISTANT EDITOR

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FIERRO, N. M.	D. C. BEYER
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KINGMINE	A. OPPERMAN
LARK	DORUS A. THOMAS
MARTIN, UTAH RAILWAY	A. J. KIRKHAM
MIDVALE	F. M. WICHMAN
NEW YORK OFFICE	A. G. BUGGY
NOME, ALASKA	JOHN TREICHLER
PACHUCA, MEXICO	C. B. LARSON
PROVO, UTAH RAILWAY	THOMAS SCHOTT
SALT LAKE CITY OFFICE	W. W. RAGER
SEATTLE	R. R. RUSSELL
SUNNYSIDE	J. T. FRANKS

PUBLISHED ONCE A MONTH FOR THE
EMPLOYEES OF THE UNITED STATES SMELTING,
REFINING AND MINING COMPANY AND
SUBSIDIARIES, IN THE INTEREST OF SAFETY,
WELFARE AND TECHNOLOGY.

Salt Lake City, Utah, November, 1931

WELFARE

The word welfare as used in relation to human beneficiaries comprehends affairs which have to do with their well-being—principally their health, happiness and prosperity. On the part of donors and social workers, the word represents both a personal and social endeavor to improve the conditions which prevail in society. There are almost as many ideas on welfare work as there are individuals who take an interest in such benevolent endeavors. Most people have rather positive ideas of what is right and wrong with other people who need assistance and also what should be done to correct their short-comings.

Notwithstanding the varied opinions which exist regarding the methods to be employed in assisting humanity, the basis for such activity has its origin in kindly interests.

Welfare work is as old as humanity and thousands of plans have been formulated to carry on the work. Some believe that individual assistance is the best method, others believe in organized social work, while still others believe that the responsibility for welfare work rests with local or general governments.

Aristotle criticised the direct distribution of public funds for the benefit of unfortunate citizens and advocated that the government purchase small farms, or render other commercial assistance. This idea has now reappeared in the "North Carolina Plan."

Cicero laid down three conditions which in his opinion should be observed in welfare work: (1) Not to do harm to the person one would benefit. (2) Not to exceed one's means. (3) To have regard to merit and consider the character of the person who should be benefited.

One of the most successful welfare systems was inaugurated in Elberfeld, Prussia, more than one hundred years ago and the plan has been so successful that it has been introduced into many other German towns since that date. The Elberfeld System is controlled by a committee or board of six citizens and four principles were adopted for the guidance of this board as follows: (1) Only needy people should be relieved. (2) Such people should be visited frequently. (3) Relief should not exceed the necessities of life. (4) Every recipient of relief should perform work suited to his capacity in return for the help given.

The first step in the work is to make inquiry regarding the ability of relatives to assist their less fortunate kinsmen. If relief is not afforded from relatives, assistance is given in the way of money, food, clothing, furniture, tools or other materials. Each city is divided into districts and each district into circuits. In each circuit there are representatives each of whom look after not more than four cases at one time. In other cases where the applicant's earnings do not provide absolute necessities of life, a "standard of income" is laid down which varies from time to time but which provides for each one. In addition, instruction and advice are given. The Elberfeld System has been successful in that it "encourages provident habits and a desire for honorable employment."

It is hardly necessary to state that if welfare work is not carried on properly, serious social disasters will follow. The financial depression itself is not nearly as serious a matter as the mental depression which has fallen on thousands of people. When people lose the incentive to fight for existence and lean too heavily upon others, they are no longer useful citizens nor good members of society.

Engineering Department

CONSTRUCTION OF DROSSING FURNACE CRUCIBLE

By MANASSAH SMITH

It is a common sight at drossing furnaces to see lead leaking through the hearth and collecting on the floor under and around the furnace. Although this lead may eventually be recovered, it presents a very unsightly appearance to the furnace and suggests improper design or careless workmanship.

When the drossing furnace was built at Midvale over two years ago, special effort was made to prevent leakage. The design and workmanship proved successful; no seepage has ever occurred and the crucible of the furnace is as good today as when it was built, although no repairs have been made to it.

To Manassah Smith, brick-layer foreman, who was largely responsible for the success of the furnace, we are indebted for the accompanying article in which he describes the crucible in detail.—F. M. Wichman.

Inside the steel shell of tank, which is supported on 6" I-beams resting on the concrete foundation, is built an 18" wall around all four sides, extending from the bottom of the tank to the level of the top of the inverted arch or hearth of the crucible. The brick used for this purpose is a brand known as "Woodland X." It is a high grade fire brick, running about 53% silica.

The space over the bottom of the tank, between the walls, is then covered with five courses of common brick, low in silica, laid in fire clay. The purpose of the fire clay is to reduce the amount of expansion of the entire mass, as fire clay has a tendency to shrink and thereby take up some of the expansion of the brick. It is important that the brick be so laid as to make a monolithic bond. All joints must be carefully filled and trowelled. Very little water is used as all moisture must be expelled from the brickwork before the furnace is placed in service.

The inverted arch or hearth is probably the most important part of the furnace, as on it rests the bath of molten metals. It is built to approximately the same radius as the roof arch, but it is upside down, therefore a base of concave shape must be provided for it to rest on.

A wooden template is provided of exactly the same shape and dimensions as the arch and this is carefully set in the exact position the arch is to take. The space between the flat surface of the common brick and the concave surface of the template is then filled with the following mixture:

Crushed silica	65%
Fire clay	20%
Coke breeze	5%
Portland cement	10%

A 2" layer of this mixture is spread evenly over the surface of the common brick and tamped. The tamping bars are made of steel, about 2" square in cross-section and roughened on the face. A smooth face does not tamp well. The face of the bar is kept hot so that the material will not stick to it.

The tamping takes considerable time, but it pays to do it well. It is done in a systematic manner, first in parallel lines lengthwise of the furnace, then across it. When this layer is completely tamped the surface is moistened to make a good bond and another layer is spread and tamped. The entire space between the top of the common brick and the bottom of the template is gradually filled in this manner. After it sets it becomes so hard that it can hardly be cut by a chisel.

This so-called mattress is now ready to receive the brick "invert." This is started at the center line or axis of the arch, using "end wedge brick" with their large ends down. Other courses are then run lengthwise. The skewback line consists of four courses to fit outside the arch and form a part of the walls that are afterwards built upon it. By this method of construction there is no danger of the arch tending to float should any molten lead get under it. All bricks, which in the arch are "Walsh T," are laid very carefully in a thin batter of Thermolite and every joint is grouted to insure a perfect bond.

The only variation in the above construction is around the tap holes where magnesite brick is used. These are carefully cut and rubbed to fit tightly against each other. All joints are broken.

The Devious Paths

John Muir was born at Dunbar, Scotland, April 21, 1838, and died in Los Angeles, California, December 24, 1914. He spent his boyhood days in the backwoods of Wisconsin. After he graduated from the university of that state, he began a series of wanderings and studies, the records of which are literary classics. Yosemite National Park was established through his efforts and he was largely responsible for our national conservation policy. "Nevada's Dead Towns" was first published in the San Francisco Evening Bulletin, January 5, 1879.—Editor.

NEVADA'S DEAD TOWNS

Nevada is one of the very youngest and wildest of the States; nevertheless it is already strewn with ruins that seem as gray and silent and time-worn as if the civilization to which they belonged had perished centuries ago. Yet, strange to say, all these ruins are results of mining efforts made within the last few years. Wander where you may throughout the length and breadth of this mountain-barred wilderness, you everywhere come upon these dead mining towns, with their tall chimney-stacks, standing forlorn amid broken walls and furnaces, and machinery half buried in sand, the very names of many of them already forgotten amid the excitements of later discoveries, and now known only through tradition—tradition ten years old.

While exploring the mountain-ranges of the State during a considerable portion of three summers, I think that I have seen at least five of these deserted towns and villages for every one in ordinary life. Some of them were probably only camps built by bands of prospectors, and inhabited for a few months or years, while some specially interesting canon was being explored, and then carelessly abandoned for more promising fields. But many were real towns, regularly laid out and incorporated, containing well-built hotels, churches, school-houses, postoffices, and jails, as well as the mills on which they all depended; and whose well-graded streets were filled with lawyers, doctors, brokers, hangmen, real-estate agents, etc., the whole population numbering several thousand.

A few years ago the population of Hamilton is said to have been nearly eight thousand; that of Treasure Hill, six thousand; of Shermantown, seven thousand; of Swansea, three thousand. All of these were incorporated towns with mayors, councils, fire departments, and daily newspapers. Hamilton has now about one hundred inhabitants, most of whom are merely waiting in dreary inaction for something to turn up. Treasure Hill has about half as many. Shermantown, one family, and Swansea none, while on the other hand the graveyards are far too full.

In one canon of the Toyabe range, near Austin, I found no less than five dead towns without a single inhabitant. The streets and blocks of "real estate" graded on the hillsides are rapidly falling back into the wilderness. Sage-brushes are growing up around the forges of the blacksmith shops, and lizards bask on the crumbling walls.

While traveling southward from Austin down Big Smoky Valley, I noticed a remarkably tall and imposing column, rising like a lone pine out of the sage-brush on the edge of a dry gulch. This proved to be a smokestack of solid masonry. It seemed strangely out of place in the desert, as if it had been transported entire from the heart of some noisy manufacturing town and left here by mistake. I learned afterwards that it belonged to a set of furnaces that were built by a New York company to smelt ore that never was found. The tools of the workmen are still lying in place beside the furnaces, as if dropped in some sudden Indian or earthquake panic and never afterwards handled. These imposing ruins, together with the desolate town, lying a quarter of a mile to the northward, present a most vivid picture of wasted effort. Coyotes now wander unmolested through the brushy streets, and of all the busy throng that so lavishly spent their time and money here only one man remains—a lone bachelor with one suspender.

Mining discoveries and progress, retrogression and decay, seem to have been crowded more closely against each other here than on any other portion of the globe. Some one of the band of adventurous prospectors who came from the exhausted placers of California would discover some rich ore—how much or little mattered not at first. These specimens fell among excited seekers after wealth like sparks in gunpowder, and in a few days the wilderness was disturbed with the noisy clang of miners and

Where Wanton Fancy Leads—Rowe

builders. A little town would then spring up, and before anything like a careful survey of any particular lode would be made, a company would be formed and expensive mills built. Then, after all the machinery was ready for the ore, perhaps little, or none at all, was to be found. Meanwhile another discovery was reported, and the young town was abandoned as completely as a camp made for a single night; and so on, until some really valuable lode was found, such as those of Eureka, Austin, Virginia, etc., which formed the substantial groundwork for a thousand other excitements.

Passing through the dead town of Schellbourne last month, I asked one of the few lingering inhabitants why the town was built. "For the mines," he replied. "And where are the mines?" "On the mountains back there." "And why were they abandoned?" I asked. "Are they exhausted?" "Oh, no," he replied, "they are not exhausted; on the contrary, they have never been worked at all, for unfortunately, just as we were about ready to open them, the Cherry Creek mines were discovered across the valley in the Egan range, and everybody rushed off there, taking what they could with them—houses, machinery, and all. But we are hoping that somebody with money and speculation will come and revive us yet."

In the case of the Nevada miner, he too often spent himself in years of weary search without gaining a dollar, traveling hundreds of miles from mountain to mountain, burdened with wasting hopes of discovering some hidden vein worth millions, enduring hardships of the most destructive kind, driving innumerable tunnels into the hillsides, while his assayed specimens again and again proved worthless. Perhaps one in a hundred of these brave prospectors would "strike it rich," while ninety-nine died alone in the mountains or sank out of sight in the corners of saloons, in a haze of whiskey and tobacco smoke.

In marked contrast with this destructive unrest is the orderly deliberation into which miners settled in developing a truly valuable mine. At Eureka we were kindly led through the treasure chambers of the Richmond and Eureka Consolidated, our guides leisurely leading the way from level to level, calling attention to the precious ore-masses which the workmen were slowly breaking to pieces with their picks, like navvies wearing away the day in a railroad cutting; while down at the smelting works the bars of bullion were handled with less eager haste than the farmer shows in gathering his sheaves.

The dim old ruins of Europe, so eagerly sought after by travelers, have something pleasing about them, whatever their historical associations; for they at least lend some beauty to the landscape. Their picturesque towers and arches seem to be kindly adopted by nature, and planted with wild flowers and wreathed with ivy; while their rugged angles are soothed and freshened and embossed with green mosses, fresh life and decay mingling in pleasing measures, and the whole vanishing softly like a ripe, tranquil day fading into night. So, also, among the older ruins of the East there is a fitness felt. They have served their time, and like the weather-beaten mountains are wasting harmoniously. The same is in some degree true of the dead mining towns of California.

But those lying to the eastward of the Sierra throughout the ranges of the Great Basin waste in the dry wilderness like the bones of cattle that have died of thirst. Many of them do not represent any good accomplishment, and have no right to be. They are monuments of fraud and ignorance—sins against science. The drifts and tunnels in the rocks may perhaps be regarded as the prayers of the prospector, offered for the wealth he so earnestly craves; but, like prayers of any kind not in harmony with nature, they are unanswered. But, after all, effort, however misapplied, is better than stagnation. Better toil blindly, beating every stone in turn for grains of gold, whether they contain any or not, than lie down in apathetic decay.

The fever period is fortunately passing away. The prospector is no longer the raving, wandering ghoul of ten years ago, rushing in random lawlessness among the hills, hungry and footsore; but cool and skillful, well supplied with every necessary, and clad in his right mind. Capitalists, too, and the public in general, have become wiser, and do not take fire so readily from mining sparks; while at the same time a vast amount of real work is being done, and the ratio between growth and decay is constantly becoming better.

Notes from Nome, Alaska

JOHN TREICHLER, Correspondent

On Friday, October 1, an Alaska Airways plane arrived from Fairbanks, having as passengers our Mr. J. D. Harlan and Mrs. Harlan, also Mr. C. C. Brayton of the American Manganese Steel Company; they reported having a fine trip. The experience of looking for a hole in a bank of clouds to get to a lower altitude was very exciting to Mrs. Harlan. Mr. Harlan brought over a few of the August "Ax" issues which we were glad to receive.

The predictions of our old time sourdoughs that a late spring would give us a late fall was a complete failure, for on September 18, winter almost set in. The temperature fell to 15° above at the ditch camps and 22° above at the Little Creek thawing areas, therefore we not only had a dry season but also a short season. The three dredges are running full blast and doing fine, however.

Moyle and Allen arrived at Nome and stayed with us two days enjoying ham and eggs and French fried at the Hollywood Grill. On telegraphic request from our Mr. R. R. Russell, in charge United States Stores Company, Seattle, we had the pleasure of furnishing them with seven hundred gallons of Union Oil Company gasoline which enabled them to reach Fairbanks on their non-stop flight to Tacoma.

On September 24, the Victoria left for Seattle with a large consignment of Hammon Consolidated Gold Fields mail and sixty-four passengers.

During the past week, the King Islanders and Diomed Islands were taken back to their winter hunting grounds by the Government boats Northland and Boxer. Owing to lack of money and tourists in Nome they were unable to dispose of their entire supply of carved ivory and other products, consequently on their last day in Nome some wonderful bargains were offered on the curb of Front Street.

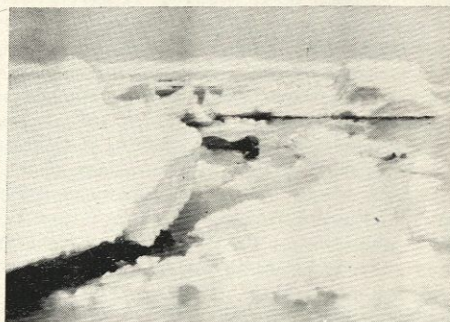
The motor schooner, Gladiator, a small boat which left here about a month ago, bound for Seattle with three young men aboard, according to a message received yesterday, got wrecked on the north side of Unimak Pass.

A slight epidemic of whooping cough and flu visited Nome. Doctor Swartz reports improvements in all quarters.

Our ivory dealer, Mr. Koch, recently returned from a trip to Fairbanks. He handed me some snapshots representing tourists visiting the Fairbanks dredges.

Doctor Swartz left on a hurried trip for Kotzebue for an emergency operation. During his absence the doctor from the cutter, Northland, looked after the good people of Nome.

The last boat for Nome left Seattle October 8, having on board twenty-three passengers, mostly Nomeites returning from their summer vacations in the States, also two tons of mail and eight hundred tons of merchandise. This boat is expected to arrive here about the 17th and,



Frequent Sight Around Nome in Winter;
Note "Friendly Visitor," Upper Center

waves permitting, will depart about October 22, taking with her as passengers our Andrew Sather, ledger clerk, who is going out for the winter; also our Rolland Brousseau, stenographer, who has been with us for one year and is leaving the service of the company. Both are good men and we will miss them.

Winter is setting in today, October 10. We are having a terrific snowstorm. The weather for September gave the following data: Temperature, 55° high, 20° low, normal 41°; minimum for 26 years, 66° high, 16° low; total precipitation, 3.38 inches, snowfall, .6 inches.

To be in the pink of condition physically and mentally, and ready and willing to do anything that needs to be done is a great substitute for genius.—George H. Knox.

Thomas Alva Edison

Thomas Alva Edison was born on February 11, 1847, in Milan, Ohio, and passed away at West Orange, New Jersey, on October 18, 1931. His grandfather was a Loyalist, exiled to Canada after the American Revolution; his father was a Canadian revolutionist, driven from Canada to the United States in the '30s. On his father's side, Edison was descended from sturdy long-lived Hollanders. His mother, Nancy Elliot, was of Scotch blood, a school teacher who possessed a keen intellect. Contrary to popular belief, Edison's parents were not "poor people;" his father was a dealer in lumber and grain with a fruit tree enterprise on the side.

In 1854, the family moved to Port Huron; five years later, Edison, at the age of twelve, began his career as a news "butcher" on Grand Trunk trains running between Port Huron and Detroit. Three years later, in 1862, he published the first "train newspaper" and demonstrated his ability to grasp opportunities by getting out a larger than usual edition when the battle of Shiloh occurred; some 1500 were sold on one trip.

In the meantime, he continued his laboratory experiments, begun at home, by transforming part of the baggage car into an experimental shop. The ignition of a piece of phosphorus terminated his career with the Grand Trunk; whether the cause of his deafness was due to "boxing" of Edison's ears by an irate agent or by his being lifted into a car by his ears, seems to be surrounded with some mystery.

In 1862, he saved from death the young son of J. U. Mackenzie, station agent at Mount Clemens, Michigan, and out of gratitude, the elder Mackenzie taught him telegraphy. His first position as a regular operator was at Stratford Junction, Canada, in 1863, at twenty-five dollars per month. From 1863 to 1868, he may be properly designated as a "tramp operator," working in Adrian and Port Huron, Michigan; Indianapolis, Indiana; Cincinnati, Ohio; Louisville, Kentucky; Boston, Massachusetts; New York City and other places. In 1868, he is said to have attracted attention in Boston as the fastest operator of the Western Union.

The year 1869 found him in New York City, poor and in debt. He secured a position through his ability to quickly repair a broken-down telegraph instrument in

the operating room of a company there. The same year he went into partnership with Franklin L. Pope and a year later received his first real money for inventions, \$40,000. In 1871, he helped Sholes make the first successful working model of a typewriter. During the next five years, 1871 to 1876, he brought out the duplex, quadruplex, sextuplex and multiplex telegraph system along with many other useful oddities.

In 1876, he moved to Menlo Park, New Jersey, where he remained until 1887, when he made West Orange, New Jersey, his home, remaining there until the time of his death.

In 1879, he brought out the incandescent electric lamp, some features of which are retained by the one in use today. During the next seven years, 1880 to 1887, he secured more than 300 patents. Between 1887 and 1890, he invented the cylinder phonograph, said to be his "pet" invention. Altogether more than a thousand patents have been issued in his name, although many of these represent the efforts of others as well as his own.

Thousands of people have been annoyed through the rattling of the disk in the old-fashioned telephone transmitter. This unpleasant noise gave Edison an inspiration. He decided that if he could find material soft enough to receive the impulses and likewise material hard enough to retain them, the human voice could be recorded; the phonograph was the result. On one occasion, during his boyhood days in Port Huron, telegraphic communication was cut off between that city and Sarnia, Ontario, across the river. Edison jumped on a locomotive and obtained permission to "whistle" messages across the river, using the Morse code. This soon attracted the attention of a telegraph operator in Sarnia and communication was established. His plan for producing iron from magnetic iron deposits in New Jersey, picking the particles up with giant magnets, was upset by the opening of the Mesaba iron range in Minnesota which cut the market price of ore in half and apparently made his plant worthless. Edison, however, through his courage and adaptability, turned the worthless property, designed for production of iron ore, into a profitable Portland cement plant.

It may be stated, without fear of contradiction, that Edison stands out as the

greatest American inventor. Edison was to mechanics what Burroughs was to birds and Burbank to plants. All three attained fame through observations and applications rather than through study of fundamental reasons. Edison will stand on his own merits. It is not necessary to ascribe mysticism or uncanniness as the reason for his success nor to claim anything for him which he did not do, although this has sometimes been done. He cared nothing for money nor society, led a life of retirement, enjoyed the society of a few friends, relished life and displayed a keen sense of humor. While he did not really believe anything which he did not understand, his life-long hope was that everything would be eventually understandable—the source of inspiration for every real inventor.

In a strict sense Edison was an inventor, not a scientist. His success lay in the fact that he could visualize devices needed to benefit civilization, apply principles or "observations" with uncanny skill and work persistently until he attained success.

His first wife was Miss Mary Stillwell to whom he was married in 1873 and who died in 1884. His second wife was Miss Mina Miller, to whom he was married in 1886 and who survives him. Mr. Edison had four sons and two daughters.

In accordance with his family wishes, he was buried in West Orange, New Jersey, the scene of much of his later work, rather than in Milan, Ohio, where he was born.

—E.M.L.

WHAT HAPPENED?

With a case of eggs upon his bended back, the toiler made his way along the hot pavement. Guess what happened? It did! Ruefully, the man regarded the scattered debris of shells and running yolks. Then he proceeded to collect the few eggs that remained unbroken.

A passing pedestrian volunteered a cheering word. "My poor man!" he exclaimed. "Have you dropped your eggs?"

The luckless one answered, acidly: "Oh, no, I'm just giving a free demonstration of our new system of open-air cookery. I'm making an omelette."

The freedom of a government does not depend upon the quality of its laws, but upon the power that has the right to create them.—Thaddeus Stevens.

Quaker City Engineer Compliments Wichman

C. C. MOORE & CO., ENGINEERS
Salt Lake City

October 23, 1931.

Mr. F. M. Wichman, Plant Engineer,
United States Smelting Refining and Mining Company, Midvale, Utah.

Dear Mr. Wichman:

The writer sent the article which you wrote on the subject of corrosion to Mr. J. D. Yoder, chemical engineer for the Cochrane Corporation in Philadelphia, who advises as follows:

"We have read with much interest Mr. Wichman's article on the subject of corrosion which appeared in the Ax-I-Dent-Ax, his company's magazine. His article shows that he has a comprehensive understanding of the subject. His observations with respect to the advantage of feeding water into the upper drum rather than the lower drum also corresponds with observations that we have made. We prefer to see the water delivered into the steam drum through a water box otherwise as near the surface of the boiler as possible, providing the water contains any oxygen.

"His comments regarding the effect of sodium silicate upon corrosion are interesting and quite logical although we cannot say that we have made any observations that would substantiate the conclusions reached. We fully agree with his basic conclusions that to prevent corrosion of boilers, the removal of oxygen is of prime consideration.

"If the water contains certain mineral substances which react to form acid in the boiler or if the water has too low an alkalinity or pH value then a chemical treatment of the water should be applied so as to give it a proper pH value."

We thought that you would like to have his opinion as he has had more than 25 years' experience in treating feed water.

Yours truly,

C. C. MOORE & CO., ENGRS.,
BY FRED E. ARNOLD.

MIGHT CANCEL THE DEAL

Said the Scientist to the Protoplasm,
"Twixt you and me is a mighty chasm,
We represent extremes, my friend,
You the beginning, I the end."
The Protoplasm made reply
As he winked his embryonic eye,
"Well, when I look at you, old man,
I'm rather sorry I began."

Midvale Mill and Smelter Notes

F. M. WICHMAN, Correspondent

Again the Flotation Mill leads in the news column, thanks to Messrs. Probert and Bartlett.

L. B. Robinson, reagent man, entered 40 chickens in the State Fair contests and won 16 prizes, five firsts, three seconds, three thirds, three fours and two fifths. In addition he was awarded the fourth display prize.

D. L. Brown, flotation test man in the mill laboratory, is availing himself of the opportunities offered for study by the University of Utah Extension Division. This season he is undertaking a course in historical geology.

Among the visiting engineers to the plant during October was Dr. Luigi Ursini, Professor of Mining at the Royal School of Mines, University of Rome, Italy. Dr. Ursini is visiting the more important metallurgical plants of the United States on a two months' tour. He remarked that during the past few months more than 1500 samples of gold ores from various parts of Africa have been submitted to his laboratory for testing and analysis.

H. G. Harmon and C. S. Beveridge of the Utah Railway engineering department were recent plant visitors.

Tom Williamson of the Crushing Plant has turned in his old car for a new Ford.

Duane Richards was taken to the hospital on September 25 and operated on for appendicitis. He is recovering rapidly.

Ralph Wanlass is also sporting a new Ford roadster.

Frank Reading was on the sick list for a couple of weeks. He is an old timer around the mill and was missed greatly.

Another contribution for the Engineering Page will soon be offered for publication. Fred Zimmerman and Charles Dimond have been working up a new pneumatic press for speeding up the forging of small bearings, pipe clamps, etc., required around the plant.

If any of the numerous deer hunters were successful we have not heard about them. They all seemed to have "passed the buck."

The Fairbanks track scale installed at the plant in August, 1930, is conceded to be one of the most accurate in the West.

On October 16 the D. & R. G. W. R. R. brought in two scale test cars from the Denver Division for standardizing on these scales. The railroad company had previously arranged for the U. S. Bureau of Standards to have the government standard weight checking equipment available on the same day. With this equipment the official test men of the Department of the Interior made a preliminary checkup on the scale and found it absolutely accurate; after which the standardization of the railroad company's cars was completed. (See Ax-I-Dent-Ax of September, 1930, for a description of the scale.) "Marty" Beckstead is official weighmaster and Joe Cotter is assistant.

"Wash" Boberg is champion ringer in the horseshoe contests that are being conducted daily at the smelter. Perhaps that is because Bob Foord has a sore thumb. When the thumb gets well, we may have another story to tell.

In a recent double tennis match at the smelter the erstwhile champions, "Charley" Bartlett and "Kelly" Hunter survived the first two rounds, but were later left grovelling in the dust by "Hen" Wahlquist and "Den" Watts to the tune of 9-7. A second set will be played in the near future.

FORMER MIDVALE GIRL

GIVEN EDITORIAL POST

A group of scientists, under the direction of Dr. Herbert E. Gregory, on leave from Yale University, is carrying on exploration work in the South Sea Islands. The headquarters of the organization is Honolulu; the work of assembling and describing material will be carried on in the Bishop Museum in that city. An editor of staff publications was needed and after looking the field over Miss Esther C. Anderson was offered the position. She is a graduate of Westminster College and the University of Michigan. At the latter institution she majored in journalism. Miss Anderson will sail from San Francisco on the "Calawaii" on November 21, and take up her work at the Bishop Museum on December 1. Miss Anderson is a daughter of Mr. L. D. Anderson, formerly chief engineer for this company and for several years superintendent of the U. S. smelter at Midvale.

Items, Literature and Personals

UNITED STATES FUEL PAYS DIVIDEND

In a recent issue, the Utah Fuel Company was erroneously credited with paying a 3½-cent semi-annual dividend.

This should have been the United States Fuel Company. On October 1, the U. S. Fuel Company, a subsidiary of the United States Smelting Refining and Mining Company, paid \$82,449.—Western Mineral Survey, October 16, 1931.

PIONEER OF GOLD HILL DAYS DIES IN LOS ANGELES

News was received in Salt Lake City this week of the death of J. J. Gerster, pioneer Gold Hill, Utah, mining man. Mr. Gerster, who was 78 years of age, went to Los Angeles recently for his health where he died of cancer from which he had suffered for several years.

Mr. Gerster, with Duncan MacVichie and Senator Reed Smoot, founded the town site of Gold Hill several decades ago, when the camp had its first important revival of activity since the days of 1870. For years he had been postmaster at Gold Hill. The Gerster property, sold to the U. S. Smelting Refining and Mining Company through George H. Short, developed into one of the biggest arsenic deposits in the country.—Western Mineral Survey, October 16, 1931.

CHINESE LAUNDRYMAN'S HOARD OF GOLD COINS AMAZES BANK

The United States possesses more gold than any other nation in the world, but the scarcity of the yellow metal in this country and the insecurity of the country's monetary system without more metallic money is well illustrated by an incident happening last week at Eureka, according to the Eureka Reporter.

A Chinese laundryman presented himself at the bank with a rag full of small gold coins. These he wanted to exchange for gold coins of a larger denomination. When the bank could not supply his demand, he could not understand why. He probably did not know that he probably had more gold in his possession than half the banks of Utah.

He did not realize, nor do most people, that gold is almost out of circulation in all parts of the country, and that a recent statement of one of the largest banks in Utah showed only \$60 in gold on hand.—Western Mineral Survey, October 16, 1931.

NEW USE FOUND FOR SILVER IN CONSTRUCTION OF RADIOS

A new non-magnetic and non-corrosive alloy, Erayde metal, has been developed by the Illinois Zinc Company. This alloy, composed of silver, copper, and zinc, is said to possess unique electric properties which are of special advantage in radio construction.

Use of silver with the copper gives a metal capable of eliminating induction and stray currents, shielding the delicate adjustment of tubes and condenser coils. The metal is particularly well adapted for use in such parts as chassis and base, shields for coils and tubes, and for loud speakers and condensers. It has a tensile strength equaling that of common brass or mild steel.—Metal and Mineral Markets.

ALASKA NEEDS PROSPECTORS TO OPEN WEALTH

SEATTLE, Wash.—John E. Ballaine, founder of the Seward and Alaska railroad, told a meeting of Alaska-Yukon pioneers here Tuesday night that 10,000 prospectors could be sent to the territory by wealthy men grub-staking them, as an aid in restoring prosperity.

The pioneer Alaskan declared he had made such a recommendation to President Hoover and Secretary Wilbur last December seeking action from federal authorities in the launching of such a campaign.

The president and secretary of the interior expressed "deep interest" in the idea, he said, but added, after it had been passed on to the unemployment relief committee, nothing further was heard of it.—Salt Lake Mining and Legal News.

UNITED STATES IS LARGEST USER OF QUICKSILVER

According to the United States Bureau of Mines, the United States is the foremost consumer of quicksilver. The average annual apparent consumption of the metal in flasks, for the period 1925 to 1928, inclusive, of the six principal world consumers is reported as follows: United States, 34,576; Germany, 26,700; the United Kingdom, 18,175; Japan, 9,710; France, 5,932, and Italy, 1,949.

Production of mercury in the United States has increased considerably in recent years, due primarily to the pegged price established by the European cartel

From Various Sources

and an import duty of \$0.25 per pound, or about \$19 per flask. Production amounted to 11,128 flasks in 1927, 17,879 in 1928, 23,862 in 1929, and 21,553 in 1930, according to the Bureau of Mines. Imports for consumption totaled 14,941 flasks in 1927, 14,562 in 1928, 14,917 in 1929, and 8,720 in 1930. In the first six months of 1931 only 205 flasks of mercury were imported into the United States, indicating a decided falling off during the current year.—Salt Lake Mining and Legal News.

METAL MINE ACCIDENTS REDUCED IN 1930

Better safety conditions at metal mines in the United States during 1930 are reflected in reports for that year which have been received from mining companies by the Bureau of Mines. Scott Turner, director of the Bureau of Mines, states that while some companies have not as yet sent their accident reports to the Bureau, a sufficient number have reported to indicate very gratifying progress in accident-prevention work during the past year. A special tabulation of the returns for 1930 which had been received by the Bureau up to April 18, covered 551 identical metal mines that were in operation in both 1929 and 1930, shows a reduction of 17 per cent in the accident rate during the latter year. The rate for 1930 for these companies was 182 accidents for each thousand men employed, while the rate for the same mines in 1929 was 220 accidents per thousand men employed.

The fatality rate for these companies was 3.08 per thousand employees, the same as in the previous year, but a substantial reduction was effected in the rate for non-fatal injuries, the figure having been reduced from 217 per thousand employees in 1929 to 179 in 1930.

According to Mr. Turner the average working period at these mines was 285 days per man as compared with 311 days in the year before. The total number of man-shifts worked by all employees at these mines was 18,700,000, about 19 per cent below the level of the previous year.

The foregoing figures represent companies that employ about 75 per cent of all men that work in the metal mines of the United States. Final and more detailed figures covering the entire metal mining industry will be published as soon

as reports have been received from the few remaining companies that have not as yet sent in their returns for 1930 to the Bureau.—Mining Congress Journal, June, 1931.

RAMPANT PATERNALISM

Taxation, both direct and indirect, has its source in the people. When equally distributed and honestly administered, the citizen receives full protection and full value for his contribution toward the cost of government; but when erratically assessed and inefficiently expended, taxation becomes a burden so heavy that industries sicken and die; whole districts become impoverished; and capital no longer seeks investment in those industries or areas.

The subject and object of taxation and its amount should be governed alike by the public need and by public policy, in order that industry may be encouraged, and increased assessment values created.

But of recent years an epidemic of tax spending agencies and useless commissions have encroached the field, combing political and social service with the economic administration of government until these activities exceed in their demands the legitimate expenditures of administration.

Whenever the people, free from all paternalism and dependent solely upon their own resources and the natural working of the law of supply and demand, evolve their own channels of trade and the markets of their choice, business and government function with the least friction. Any attempt to alter this condition disrupts the entire economic machine.

Of recent years, however, there has arisen a school of thought which endows public officials with supernatural powers as custodians of wealth, morals, comfort, employment and prosperity.

Already one day's labor in each week, for our entire population, is contributed to the expense of government. Increased taxes and larger borrowing all lead to constantly rising taxation in years to come; while the people ignore the inevitable toll of the future.

Only by restraining public officials from their present prodigality, and by refusing to concur in continued paternalism of government can the orgy be stopped.—Editorial, The Mining Congress Journal, August, 1931.

Utah Railway Company Notes

Provo, Utah

THOMAS SCHOTT, Correspondent

Mr. R. E. W. Simpson, traveling accountant for the L. A. & S. L. Railroad, unit of the Union Pacific System, with headquarters at Los Angeles, California, was a business visitor at the Provo Joint Shops on October 21.

Mr. W. G. Dahl, traveling accountant for our company, with headquarters at Salt Lake City, was a business visitor at the Provo Joint Shops on October 21 and 22.

Mr. R. J. Miner, representative for the Miner Incorporated at Chicago, Illinois, with headquarters at that city, was a business caller at the Provo Joint Shops on October 19.

Mr. C. A. Rolling, service engineer for the Garlock Packing Company, with headquarters at Salt Lake City, was a business caller at the Provo Joint Shops on October 19.

Mr. William Flint, service engineer for the Standard Oil Company of California, with headquarters at San Francisco, California, accompanied by Mr. Fred Hischier, local salesman for the same company, located at Provo, were business visitors at the Provo Joint Shops on October 20.

Mr. W. R. Spettigue, chief safety agent for the L. A. & S. L. Railroad Company, with headquarters at Los Angeles, California, accompanied by Mr. J. T. Wardenburg, trainmaster for the same company, with headquarters at Salt Lake City, made an inspection and check for fire hazard at the Provo Joint Shops and Yards on October 9.

Mr. L. H. Warren, district manager for the Shell Oil Company, with headquarters at Salt Lake City, was a business caller at the Provo Joint Shops, October 1, 14 and 18.

Mr. C. E. Beveridge, engineer maintenance of way and structures for our company, with headquarters at Martin, was a caller on business at the Provo Joint Shops and Yards on October 6 and 9.

Mr. H. V. Jones, service engineer for the Superheater Company, with headquarters at Denver, Colorado, was a business caller at the Provo Joint Shops on October 7.

Mr. H. B. Nelson, representative for the Prime Manufacturing Company, with

headquarters at Milwaukee, Wisconsin, was a business caller at the Provo Joint Shops on September 28.

Mr. R. W. Schulze, representative for the Cardwell-Westinghouse Draft Gear Company, with headquarters at Chicago, Illinois, was a business caller at the Provo Joint Shops on September 28.

Mr. J. F. Long, S. M. P. & M. for the L. A. & S. L. Railroad Company, unit of the Union Pacific System, with headquarters at Los Angeles, California, made an inspection of Provo Joint Shops and Yards on October 9.

Mr. R. J. Knapp, mechanical expert for the Westinghouse Air Brake Company, with headquarters at Salt Lake City, accompanied by Mr. J. B. Somo, assistant superintendent, with headquarters at Provo, departed for Martin, October 6, where a check and inspection was made of air brake equipment on locomotives and freight cars.

Merrill Harris, age 17, son of Brake-man B. E. Harris, was accidentally shot by rabbit hunters at Evanston, Wyoming, while engaged in playing checkers in the road camp of J. W. Whiting Company on September 26. The stray .22 calibre bullet struck him in the back and was deflected by a rib and rested near his heart. The attending physician at first considered the wound as superficial and as the slug gave trouble it was decided to operate for its removal. The son lived only a short time after the operation and passed away on October 3. Funeral services and interment took place in Springville. Our sympathy is extended to our fellow employe and the survivors.

Mr. J. T. Wardenburg, trainmaster for the L. A. & S. L. Railroad Company, with headquarters at Salt Lake City, was a business caller at the Provo Joint Shops and Yards on October 15.

Mr. O. S. Jackson, general superintendent of motive power and machinery of the Union Pacific System, died September 26 at Omaha, Nebraska, after an illness of several months. Mr. Jackson joined the Union Pacific System in 1921 as assistant superintendent of Motive Power and Machinery, was promoted to superintendent of Motive Power and Machinery in 1923, and was made general superintendent of

that department in 1928. He was also the chairman of the American Railway Association, mechanical division. Our sympathy is extended to the bereaved.

Mr. J. W. Highleyman, general superintendent Motive Power and Machinery for the Union Pacific System, with headquarters at Omaha, Nebraska, accompanied by Mr. J. W. Burnett, assistant general superintendent, with headquarters at Pocatello, Idaho; Mr. J. F. Long, S. M. P. & M. for the L. A. & S. L. unit, with headquarters at Los Angeles, California, and Mr. W. J. Kirsch, master mechanic for the latter company, with headquarters at Salt Lake City, made an inspection of the Provo Joint Shops and Yards on October 14.

Mr. W. W. Thomas, district superintendent for the Continental Oil Company, with headquarters at Provo, accompanied by Mr. T. Farrell, district manager for the same company, with headquarters at Salt Lake City, were business visitors at the Provo Joint Shops October 14 and 15. The latter was also a visitor on the 19th.

DURIEZ TO EUREKA

Mr. Leo H. Duriez, formerly superintendent of the Hanover Bessemer Iron and Copper Company at Fierro, New Mexico, has been transferred in the same capacity to the Sunnyside Mining and Milling Company properties at Eureka, Colorado.

SAFETY IN JAPAN

We reprint below extracts from "Rules for Safety," taken from a Japanese safety-first poster. They are good rules in any language. We are indebted to Mr. H. K. Watanabe, general secretary of the Japanese Commercial Museum, 549 Market Street, San Francisco, for the translation of this poster:

Even if you feel quite safe, attention once more.

The ways to accidents are "Looking away" and "Idle talks."

Late hours, and the morning accidents.

Attention—first to gear, second to belt, third to roller.

Stop the machine when cleaning. The machine on motion will bite you any moment.

Long hairs and short life.

Don't throw, don't drop, and don't roll.

One match for smoke is not merely a spark, but the mother of fire.

The movement for safety is for your own benefit.—California Safety News.

Coal Dust from Hiawatha, Mohrland and Panther

J. G. REESE, Correspondent

At the regular meeting of the Parents-Teachers Association of Hiawatha, the following officers were elected for the ensuing year: Robert McKinnon, president; H. A. Dahrud, vice-president; J. G. Reese, secretary-treasurer. The Entertainment Committee, elected by vote of the association, were: Mrs. Joseph Parmley, chairman; Mrs. W. B. Jones and Mrs. E. N. Love. Meetings are to be held regularly each month. After a program lasting an hour, dancing was enjoyed till midnight when the meeting was adjourned.

The deer hunters of Hiawatha have been unusually lucky this year, and eleven deer have been brought into camp so far. Among the lucky ones are D. V. Garber, Cuddy Russell, W. G. Burgess, Stanley Edwards, Frank Burdick, Carlyle Edwards, Ed Reese, Tom Jensen, Coreless Asay, Jim Asay and A. Peperabis. All eleven deer were killed between Clear Creek and Huntington River on the divides.

THE REASON WHY

In the proofroom copyholders

Chant the livelong day;

And "quote, com, quote, bang, cap, paren"

Is mostly what they say.

From this strange language rarely comes

A chance familiar word;

And here's what one who listened in

Declares is what he heard:

"Par quote dear one cap I love you

Ital I cannot say

Bang quote ellipsis par paren

The girl com turned away

Point close paren quote par again

Com liar bang said she

Quote where's my ring bang dash one em

You bum ellipsis three."

This is the song of the copyholder

As she hums away at her task,

Broken only at intervals

By a question the reader asks.

And since they listen hour on hour

To this ceaseless, senseless whang,

Is it any wonder, do you think

That proofreaders' minds go "bang"?

—Margaret L. Smith.

Something to Think About

By **ERNEST N. SMITH**, Executive Vice-President
American Automobile Association

At the end of the vacation season, and when the depression was supposed to be at its worst—that is, around the Labor Day holiday—5,000 Americans went to Bermuda on seven steamers—just to have a good time. They spent an average of \$100 each. The American public spends \$30,000,000 a week in 17,097 motion picture houses. I am told this industry is the largest and most persistent advertiser in the country today. The electric flat-iron, heavily advertised some years ago, was the leading household appliance in the use of current. Next was the vacuum cleaner, followed by radio sets and washing machines. Last year the electric refrigerator advanced to first place as the most important appliance in domestic electric service.

During the period in which American Automobile Association clubs lost 75,000 members, the American Legion gained 200,000 members. They sold their prospects on what their organization could do for them. The average age of Legionnaires is thirty-seven years.

Hoarding of money by individuals is being practiced to an extent never before known in this country. Economy is a virtue, not a vice, and saving is to be lauded. But over one-half of all the gold in the world is in our country today. It takes harder work to secure it, more skilled salesmanship to sell, an increasing number of prospects to call upon, but the money is there to be had. A large proportion of people out of work, I think, are not automobile owners.

Our government reported an excess of expenditures over income of \$400,000,000 for the first two months of their fiscal year, to-wit, July and August. But don't forget there were no income tax receipts due in that period.

The youth movement in Germany has started young and old people to tramping about the country for health and recreation. This has led to the establishment of inns particularly for this class of travel. Each inn has kitchens where the guests do their cooking. Sleeping accommodations are comfortable enough and there is always a central social room.

When times are hard, tastes are simple and people are more apt to gather into

groups and share expenses. There will be many two-family vacations in one car. Perhaps people could be induced to share the expense of a motor club membership between them.

A wise man made this statement to Bruce Barton, who reported it as follows:

"You have still some time to go before you make the most important discovery in life. I made it at the age of forty-five, and it changed my whole perspective.

"The discovery is simply this—trouble is chronic. Most people get discouraged because they proceed on the false assumption that life is normally joyous, that its problems and difficulties are exceptional blemishes on an otherwise delightful experience.

"That is not the fact. Man is born with no guarantee that happiness is to be his daily portion. Pleasure is no part of the life contract. Life is work and worry and difficulty, with occasional moments of delight. Trouble is not acute; it is chronic.

"When you once get that idea it gives you a whole new outlook. You are no longer surprised and discouraged to find worry in the morning mail. You expect it. You say to your secretary: 'Give me the day's quota of grief at once; let me wade into it first.'

"The long period of prosperity following the war tended to soften our spirits and destroy our perspective. We began to assume that things would always be easy. We were unaccustomed to difficulties, and some of us have borne them none too well."

A grape juice company selling in country stores puts a tinted glass tumbler over the top of each quart bottle of grape juice. When father buys a dozen bottles he has won twelve attractive glasses for mother.

Trans-Atlantic steamship companies have more passenger boats than they can use under present business conditions. So the Cunard-Anchor Line is offering entire boats for conventions to be held at sea.

NOT THE HUMIDITY

"Hey, waitress! There's a dead fly in my soup."

"Yes, sir. It's the heat that kills 'em."

S. S. Cathwood Calls at Nome

Nome, Alaska, jutting into the turbulent waters of the Bering Strait—which separates the Americas from Continental Asia, still carries on its quest for gold, a quest which during the bonanza days immediately preceding and following the turn of the current century, filled the pages of its history with a romance and color that has never before or since been equaled.

But, the present day methods of mining gold are a far cry from those which obtained in the years when the gold rush was at its peak. Machinery, shipped in by boat, and modern fuels and lubricants have displaced the pick and shovel and "elbow grease." Gold mining in the vicinity of Nome is today done on a scientific, methodical basis, quite different from that which marked the discovery of the precious ore.

Many boats during the course of a year call at Nome with domestic and industrial supplies. It has taken on new significance in recent months as it has been the refueling point for three of the outstanding aerial ventures of the year: the Post and Gatty, globe-girdling flight (the actual stop was made at Solomon, but the plane flew over Nome); the attempt of the Spirit of Fort Worth to fly from Seattle to Japan, and the Lindberghs' leisurely trip to the Nipponese kingdom.

The Union Oil Company regularly ships supplies to Nome, last month dispatching more than 13,000 barrels of fuel oil, some 20,000 barrels of Union Diesol, and 1579 packages containing lubricants, greases, gasolines, and kerosenes, etc., aboard the Union tanker S. S. Cathwood, under command of Capt. O. Phillipsen. Consigned to the United States Stores Company, the supplies are used in power plants maintained for dredging gold in the vicinity of Nome.

Bringing in fuel and lubricants is a tedious enterprise. It is necessary to anchor the tanker more than a mile offshore and convey cargoes to shore storage by means of barges, the gradual sloping bottom in the bay making it impossible to bring a ship, which draws more than a few feet of water, to the unloading dock.

The barges, which are virtually hollowed rafts having a capacity of approximately 500 barrels, are moved by tugs. They are tied along side the tanker, a supply line

from the ship's hold dropped, and the discharging pumps set in operation. When loaded, the barge is moved to shore and another tied up to the tanker. The process is repeated until all cargoes are ashore.

The oil is stored in old tanks, the fuel going to wooden storages, and the Diesol into a 55,000-barrel steel tank near the power plant. Package goods are stored in warehouses and drawn upon as needed.

The giant dredgers which mine for gold are a sharp contrast to former methods, and have been adopted only after exhaustive tests of different types of similar equipment. Each dredger is built on the location where the dredging is to be done. It is put together in a large, deep excavation, and when ready for operation, is floated in water. Scooping into the ground around it, the dredger, the operation of which is controlled by one man located in a central control-room, takes up the mud and rock in a conveyor. From the conveyor, the rock and muck are dumped into a revolving drum which is liberally punctured with holes through which four streams of water wash the finer particles onto tables. On the tables, the gold is separated from the muck and water. The rock is thrown off into a dump and the water returns to the basin in which the dredger is working. At four-week intervals the dredgers are stopped and the gold collected. Power is supplied the dredgers from a centrally located plant which has six 525-horsepower Diesel engines in constant operation.

The most interesting feature of the entire mining operation is the preparation of the ground for dredging. So solidly frozen is the soil during the winter that it must be thoroughly thawed before it can be worked. The thawing operation consists of driving long pointed pipes down into the ground, and then forcing water from a central distribution system through the pipes. The number of pipes used in a given area is dependent upon the degree to which the ground is frozen and the consistency of the soil. Where the ground has been frozen for a long time more pipes are required. The thawing process must be carried out for two or three summers before it is possible for the dredger to work the ground. Gold was first discovered at Nome in 1898.—Union Oil Bulletin for September, 1931.

Utah Railway Company Notes

Martin, Utah

A. J. KIRKHAM, Correspondent

On October 15, the Helper Building Company commenced work under contract for the erection of a four two-room apartment house at Martin, Utah, to be used as an enginemen's dormitory for main line or pool engine crews working out of Provo. The building is ready for occupancy on November 1. This frame building has been erected in Martin town-site and is very substantially built.

The National Coal Company are now arranging for the installation of a track scale on their property on the National Coal Railway. This feature will eliminate the necessity of weighing their coal output enroute to destination.

The Standard Coal Company are now loading out a number of cars of slack coal from their large storage pile near Ashton on the Utah Railway. This indicates that the coal business is showing some signs of increase and it is anticipated that with the approach of colder weather the coal business will be considerably revived.

Mr. E. S. Bray, who has been employed at Provo as car clerk, displaced Mr. A. L. Tucker, bill clerk, at Martin, on October 27.

On October 10, at M. P. 18½ Utah Railway main line, a landslide consisting of 300 to 400 yards of shale came down, covering the track with several feet of material and pushing the track out of line about 14 inches. Fortunately the work train was in the Kingmine district and the line was opened without delay to trains.

On the opening day of the deer season, a number of Utah Railway employes from Martin were found on the field in quest of the wild and wiry buckskin. L. B. Smith, general foreman, and H. W. Clark, engineer, were among the fortunate ones in stopping the progress of six-point and seven-point bucks.

Mr. Joe Montello, who has been employed by our company as engine watchman at Martin for the past nine years, passed away at Saint Mark's Hospital on October 14 and was buried at Helper on October 18. Mr. Montello's wife and two sons reside in Italy and he had anticipated going to the old country next spring. "Joe" was a conscientious and faithful employe and we regret his passing.

Considerable activity is noted at the Blue Blaze Coal Mine on the National Coal Railway and from 50 to 60 cars of coal are being loaded on the days that this mine works. This company is now erecting a modern, up-to-date machine shop of cement block construction near the mouth of the mine, thus facilitating the handling of machine work and making repairs more promptly.

During the past month, the weather conditions have been ideal, though a little dry, for handling of maintenance of way work and the moving of coal. Much moisture is needed throughout the entire district. The usual fall of snow is looked for before the winter is over.

Chief Engineer Rathjens and Assistant Engineer Harmon have spent considerable time in the Martin-Kingmine district during the past month in connection with various items requiring their service.

Mr. F. H. Greene of the Accounting department spent a day at Martin during the month in connection with station work.

The unemployment situation in Carbon County is still a rather serious matter. With the advent of cold weather some few men have been put to work at the mines. However, there is still a large number of men out of employment. Cash contributions have been solicited in order to procure merchandise to provide for a large number of families, some of which are in destitute circumstances. Utah Railway employes have been generous in this respect and have assisted the Relief Commission by cash donations.

DEAD FROM HER NECK BOTH WAYS

The section foreman, making a hurried report to the superintendent relative to a cow having been killed on the right-of-way, advised as follows:

"The cow fell over the bank onto the track and broke her neck. The train struck her and killed her and knocked her into the river and she was drowned."—Utah Railway Company.

HELP WANTED!

Help wanted in getting out the Christmas number. Please give your correspondent stories, items and personal notes, doing this before December 1, 1931.

The Man We Are Too Prone to Forget

Is there such a man? If so, who is the forgotten man? Why ask the question when sober thought compels the conviction that he resides in every city, town, village, and hamlet of this broad country of ours? The forgotten man is the simple soul who gives an honest day's work, pays his bills, attempts to rear two or more children in the way they should go, endeavors to maintain a small bank account against an evil day, never gets into trouble with the police, never asks for charity, and never sends a letter to the agony column of the local newspaper. More briefly, the forgotten man is in all reality the bulwark of honest Americanism—the man who keeps going upon his own momentum in good times, bad times, or times fabricated in the heated imaginations of subservient slide rules dependent for patronage upon social engineering customs.

In times of stress, times wherein the weaker brethren and sisters pray and yell lustily for aid, the forgotten man contributes his mite; albeit he may do so with his tongue in his cheek and numerous mental reservations. But that he does contribute is well attested by the many "successes" of the numerous "drives" made upon him.

The federal collectors of internal revenue may not be bothered much, if at all, by keeping check upon the income returns of the forgotten man. None the less the forgotten man pays heavily in taxes for the upkeep of jails, penitentiaries, police courts, and criminal courts, equity courts and courts of appeal, almshouses and insane asylums, and "good roads"—which he rarely, if ever, uses!

Self-denying, self-supporting, and self-starting though he be, the forgotten man is never mentioned in public print save in the federal census; but there he cuts a wide swath because he, you, and I are the forgotten men who constitute the vast majority of the electorate of the "Land of the Pilgrim's Pride," and therefore should rule it—but we don't! A future Gibbon when he writes "The Decline and Fall of Moronia" will not fail to make Gibbonesque sarcasms upon some of our current stupidities.

The forgotten man, the man who thinks is the man who can be counted upon in times of peace or war, and in times of hectic prosperity or gloomy depression. Let us not forget that there are more than a few million of him in these United States. Despite the nation's lack of leadership, the forgotten man will not go crazy—he never has! John Smith—that's his name—is just as sane today as he was when he caused the Declaration of Independence and the Bill of Rights to be written. Keep your eye upon him! Unfortunately, John always has been guilty of allowing affairs, national and international, to reach an impasse before he makes a move.

No, John Smith is not a moron. His greatest fault (if it is a fault) lies in the fact that he minds his own business so well that ever and anon, before he is aware of it, organized minorities of fools, directed by human jackals, make his life a hell. However, at the present moment John is pretty well fed-up. Watch him!

—Kalends

To Autumn

Season of Mists and yellow fruitfulness!

Close bosom-friend of the maturing sun;
Conspiring with him how to load and bless
With fruit the vines that round the thatch-eaves run;
To bend with apples the mossed cottage-trees,
And fill all fruit with ripeness to the core;
To swell the gourd, and plump the hazel shells
With a sweet kernel; to set budding more,
And still more, later flowers for the bees,
Until they think warm days will never cease,
For Summer has o'er brimmed their clammy cells.

Who hath not seen thee oft amid thy store?

Sometimes whoever seeks abroad may find
Thee sitting careless on a granary floor,
Thy hair soft-lifted by the winnowing wind;
Or on a half reaped furrow sound asleep,
Drowsed with the fume of poppies, while thy hook
Spares the next swath and all its twined flowers;
And sometimes like a gleaner thou dost keep
Steady thy laden head across a brook;
Or by a cider-press, with patient look,
Thou watchest the last oozyings, hours by hours.

Where are the songs of Spring? Ay, where are they?

Think not of them thou hast thy music too,
While barred clouds bloom the soft-dying day,
And touch the stubble-plains with rosy hue;
Then in a wailful choir the small gnats mourn
Among the river shallows, borne aloft
Or sinking as the light wind lives or dies;
And full-grown lambs loud bleat from hilly bourn;
Hedge-cricket sing; and now with treble soft
The red-breast whistles from a garden croft,
And gathering swallows twitter in the skies.

—John Keats